## List of Current Sensor-related patents or patents pending at LaRC

| Case Number    | New Technology Report Title   |
|----------------|---|
| LAR-14588-1-CU | Non-Mechanical Optical Path Switching Its Application To Dual Beam Spectroscopy Including Gas Filter Correlation Radiometry |
| LAR-15818-2    | Optical Path Switching Based Differential Absorption Radiometry For Substance Detection                                     |
| LAR-15818-3    | Optical Path Switching Based Differential Absorption Radiometry For Substance Detection                                     |
| LAR-16116-1    | Giant Magnetoresistive Based Self-Nulling Probe<br>For Deep Flaw Detection  |
| LAR-16231-1-CU | MEMS Based Acoustic Array   |
| LAR-16279-1    | Carbon Nanotube Based High Bandwidth Imaging And Sensing Device   |
| LAR-16393-1    | Sonic Transducers And Sensors Using Radial Field Diaphragms   |
| LAR-16440-1    | Method Of Determining Intracranial Pressure From Skull Expansion Measurements   |
| LAR-16475-1    | Carbon Nanotube-Based Structural Health<br>Monitoring Sensor  |
| LAR-16510-1    | Non-Invasive Method Of Determining Absolute Intracranial Pressure   |
| LAR-16516-1    | Autonomous Health Monitoring Architecture<br>Hardware   |
| LAR-16538-1    | Micro-LiDAR For In-Flight Flow Velocimetry And Boundary Layer Control   |
| LAR-16549-1    | Inductor (L)-Capacitor (C) (aka, LC) Sensor<br>Circuit For Piezo Material Monitoring  |
| LAR-16556-1    | Planer Internally Interdigitated Transducer   |
| LAR-16571-1    | LC Sensing Element For Closed Cavities Having<br>Low Radio Frequency Transmissivity   |
| LAR-16571-2    | Magnetic Field Response Sensor For Conductive Media   |
| LAR-16573-1    | Carbon Nanotube Based Light Sensor  |
| LAR-16575-1    | Instrumented Crimping Tool For Critical Wiring Applications   |
| LAR-16640-1    | Programmable Smart Grating Device With Quantum Aperture Array   |
| LAR-16698-1    | High Performance High Efficiency Hybrid Actuator Systems (HYBAS)  |
| LAR-16858-1    | Thin, High-Contrast Targets for Ultralightweight<br>Structures  |

| LAR-16886-1 | Dual Sensing Capable Germ Or Toxic Chemical (GTC) Sensor Using Quantum Aperture Array With Surface Plasmon Polariton (SPP)                                 |
|-------------|--|
| LAR-16900-1 | CNT based crack growth detector and strain field monitor   |
| LAR-16908-1 | Magnetic Field Response Measurement Acquisition<br>System (Includes LAR-16138-1, LAR-16554-1,<br>LAR-16591-1, LAR-16614-1, LAR-16617-1, & LAR-<br>16908-1) |
| LAR-16950-1 | Ferroelectric Light Control Device   |
| LAR-16970-1 | Method For Determining Cracks On And Within Composite Panels   |
| LAR-16974-1 | Methods Of Mounting Erectable, Flexible And Fixed Magnetic Field Response Sensors  |
| LAR-17013-1 | Thermally Driven Miniature Piston Actuator   |
| LAR-17073-1 | Interdigitated Electrode Actuators For Straining Optical Fibers (IDEAS)  |
| LAR-17116-1 | Wireless Fuel Volume Measurement Techniques  |
| LAR-17155-1 | Wireless Fluid-Lead Measuring Dipstick Assembly (Broken Out Of LAR-16974-1)  |
| LAR-17168-1 | Cylindrical Shaped Micro Fiber Composite (CMFC) Actuators  |
| LAR-17229-1 | Thin-film evaporative cooling concept for a solid-<br>state laser diode crystal  |
| LAR-17231-1 | Electro-Optic Micro-Zone-Plate as a Programmable Micro-Lens and Micro-Spectrometer   |
| LAR-17235-1 | Multi-Point, Multi-Component Interferometric Rayleigh/Mie Doppler Velocimeter  |
| LAR-17237-1 | Photonic DART (Densely Accumulated Ray-point by micro-zone-plaTe)  |
| LAR-17241-1 | Optical Data Storage System with Micro Zone Plate  |
| LAR-17242-1 | MICRO-RING THIN-FILM SPECTROMETER<br>ARRAY   |
| LAR-17257-1 | Detecting the loss of configuration access of reprogrammable Field Programmable Gate Array (FPGA) without external circuitry                               |
| LAR-17268-1 | Integrated mitigation for single event upset (SEU) of reprogrammable field programmable gate arrays (FPGA) operating in radiation environments             |
| LAR-17280-1 | Magnetic Field Response Measurement Acquisition System   |
| LAR-17294-1 | Low Profile Sensors Using Self-Resonating Inductors  |
| LAR-17295-1 | System For Providing Damage Detection And Thermal Protection   |

| LAR-17300-1 | A Method and Apparatus for Determination of the<br>Reflection Wavelength of Multiple Low-Reflectivity<br>Bragg Gratings in a Single Fiber |
|-------------|---|
| LAR-17317-1 | Extreme Low Frequency Acoustic Measurement Portable System  |
| LAR-17323-1 | Concept And Design Of Oxygen Band Radar For<br>Surface Air Pressure Remote Sensing  |
| LAR-17416-1 | Integrated Universal Chemical Detector with Selective Diffraction Array   |
| LAR-17425-1 | Micro Spectrometer for Parallel Light   |
| LAR-17432-1 | Forward Voltage Short Pulse (FVSP) Technique for Measuring High Power Laser Diode Array (LDA) Junction Temperature                        |
| LAR-17433-1 | A Multi-Measurement Wheel Sensor  |
| LAR-17440-1 | Resonant Difference-Frequency Atomic Force Ultrasonic Microscope  |
| LAR-17444-1 | Wireless Tamper Detection Sensor Requiring No Electrical Connection   |
| LAR-17469-1 | Micro Ring Grating Spectrometer with Moveable<br>Aperture Slit  |
| LAR-17480-1 | A Method To Calibrate Magnetic Response Fluid-<br>Level Sensors Using Complete Sensor Immersion<br>In Fluid                               |
| LAR-17488-1 | Thin-Film Sensor For Measuring Liquid-Level And Temperature Having No Electrical Connections  |
| LAR-17495-1 | An Optical Method For Detecting Displacements And Strains At Ultra High Temperatures During Thermo-Mechanical Testing                     |
| LAR-17539-1 | Development Of Eddy Current Techniques For The Detection Of Stress Corrosion Cracking In Space Shuttle Primary Reaction Control Thrusters |
| LAR-17547-1 | Line Tunable Visible and Ultraviolet Laser  |
| LAR-17573-1 | Air Coupled Acoustic Thermography Nondestructive Evaluation System And Method   |
| LAR-17579-1 | Wireless Chemical Sensing Using Changes To An Electrically Conductive Reactant Within Sensor's Magnetic Field                             |
| LAR-17629-1 | A Method for Shape Determination of Multi-Core<br>Optical Fiber   |
| LAR-17634-1 | Distributed transducer capable of generating or sensing a transverse point load   |
| LAR-17711-1 | Wireless Electrical Applications/Devices Using  "floating Electrodes" Electromagnetically Coupled  to Open-Circuit Devices                |